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Demonstration Project: Services Provided Through Regional Managed Care Partnerships (1115 Waiver)

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CHAPTER 1

WHAT HEDIS IS

and Why We Need It

HEDIS 3.0 is a giant step forward in the nation's effort to develop a standard set of measures that will give purchasers and consumers the ability to assess the value of the increasingly costly health care services they buy and use. At a time of political gridlock and an era of rampant discord, a broadly constituted committee representing different and often competing interests achieved consensus across a broad range of issues. The product of this consensus — HEDIS 3.0 — is a set of performance measures of unprecedented scope and reach. It is also a process for the continued enhancement of that set, through the systematic, open and rigorous solicitation and evaluation of the new measures the public will need as we move toward the 21st century.

In the chapters that follow, we will describe how HEDIS 3.0 came to be and the details of the measures that are included in it. You will learn how much effort went into its construction and how comprehensive is the result. In the remaining sections of this chapter, we'd like to provide some context for HEDIS 3.0 — to help you understand why that level of effort was required and why the result is so important.

WHAT IS HEDIS?

HEDIS — the Health Plan Employer Data and Information Set — is a set of standardized performance measures, designed to ensure that the public has the information it needs to reliably compare the performance of managed health care plans. The development of HEDIS was sponsored and staffed by the National Committee for Quality Assurance (NCQA), a not-for-profit organization committed to evaluating and reporting on the quality of managed care plans.

NCQA's primary objective is to develop strategies and systems to establish accountability in the managed care industry. HEDIS is one component of a larger accountability system. HEDIS is about the results that health plans achieve. It operates as a complement to NCQA's Accreditation program. NCQA Accreditation is a rigorous and expert evaluation of how managed care plans are organized and how they operate. In combination, the results from NCQA Accreditation and from HEDIS measurement provide the most complete view of health plan quality available to purchasers and consumers today. HEDIS 3.0 extends that view significantly beyond NCQA's earlier work.

WHY DO WE NEED HEDIS?

The past two decades have been years of extremely rapid increase in health care costs. As costs have increased, those who purchase health benefits — both the large corporations that purchase care on behalf of their employees and the public Medicare and Medicaid programs that purchase care on behalf of the senior population and the poor — have become increasingly concerned that the "value" of health care has not risen proportionately. As health benefits consume an ever-larger proportion of the expense sheet, these purchasers have sought means to assess the relative value of the care offered by the managed care health plans with which they contract. HEDIS offers that possibility. In addition, HEDIS helps purchasers and consumers distinguish among plans on the basis of comparative quality, instead of simply on cost differences.

HEDIS is a set of standardized measures that supports market-based reform in health care: If those who choose their health care plan do so based on demonstrated value, then the market will drive health plans to improve performance as well as to reduce cost. The result can be higher levels of quality, without excessive regulation that could limit innovation.

The value that HEDIS represents exists on two fronts. First, HEDIS measures give the public an unprecedented ability to understand how well health plans are achieving the results that matter — how effective and satisfying is the care and service delivered; how accessible is that care; how well is the plan equipping its members to make informed choices about their own health care; and so on. But just as important, HEDIS measures ensure that results will be comparable across health plans. Because HEDIS measures are defined with attention to detail — and because the development of HEDIS measures has taken advantage of the knowledge of those who understand health plan operations and health plan data systems — HEDIS measures are uniquely able to provide information that allows comparison.

Much of the work of developing HEDIS is "simply" the work of turning a straightforward concept (are children with asthma getting the care they need?) into a set of rules that can be unambiguously interpreted and consistently applied across health plans, and that account for differences in data systems (and in population risk) that might affect results independent of health plan performance. We have learned that this kind of translation is nowhere near as simple as it seems, and that without considerable attention to the operational details, conceptually attractive measures in fact offer no useful information. A considerable — and unique — component of the value of HEDIS is the extraordinary attention to these (and to other equally challenging) statistical details.

WHAT IS HEDIS 3.0?

HEDIS 3.0 is the third such set NCQA has produced. NCQA's first set — HEDIS 2.0 — was an enhancement of an earlier version (HEDIS 1.0) developed by a consortium of large corporations (Bull HN Information Systems, Inc., Digital Equipment Corporation, GTE and Xerox Corporation), Towers Perrin, and health plan representatives from The HMO Group (a coalition of group- and staff-model HMOs that organized the effort). HEDIS 2.0 was released in November 1993 and moved rapidly into the managed care marketplace. In 1996, more than 330 health plans are producing HEDIS statistics, and a majority of the large corporations that purchase managed care benefits are using HEDIS data to help guide their managed care purchasing decisions.

With the release of HEDIS 2.0, there was great interest in developing performance measures for publicly insured populations as well. With assistance from the Health Care Financing Administration (HCFA) and the American Public Welfare Association (APWA), NCQA organized a broadly constituted committee of representatives from state Medicaid programs, Medicaid advocacy groups, health plans and others with relevant expertise, and undertook to adapt the HEDIS 2.0 statistics for application to the Medicaid program. This work took nearly two years; the product of this "Medicaid Workgroup" (Medicaid HEDIS) was released in February 1996.

Medicaid HEDIS resembles HEDIS 2.0 quite closely; differences arise primarily from demographic differences in the Medicaid population (which is disproportionately composed of women of child-bearing age and young children) and from technical modifications to measures necessary to account for rapid turnover in the Medicaid population (less than half of Medicaid enrollees stay in a health plan for a year or more).

The demand for information relevant to the Medicare program, and useful to the senior population for whom Medicare operates, prompted discussion about the development of a set of performance measures for the Medicare risk population — a "Medicare HEDIS" — to supplement HEDIS 2.0 (which was renamed HEDIS 2.5 after a set of technical modifications in 1995) and the Medicaid set. Discussions among NCQA, the Health Care Financing Administration and the Kaiser Family Foundation, however, suggested that efforts to develop measures for the Medicare risk population should be folded into NCQA's planning for HEDIS 3.0, which was intended to be, from the outset, a performance measurement set made up of statistics that permitted integration of measurement across the public and private sectors.

Why were HEDIS 2.5 and Medicaid HEDIS brought together and a Medicare set developed as part of that integration? There are many reasons:

- It is extremely costly to develop and maintain the structures required to build performance measurement sets. A process for supporting a single, integrated set of measures is far more efficient to build and maintain than would be processes for multiple, independent sets.

- It can be highly burdensome for health plans to produce performance measures. A single set of measurement specifications that can be used for different populations is less costly for health plans than multiple specifications.
- There is more statistical power in evaluating a single (large) population than in evaluating smaller subpopulations. A single specification that permits data to be aggregated across populations (e.g., diabetic members insured under both commercial policies and Medicare) creates the potential for statistically more powerful measures.
- A single measurement specification used for different populations makes it possible to compare results not only across plans, but also across populations in a plan.

But the most compelling reason to develop a single set of measures has nothing to do with cost or statistical power. It follows from a basic philosophical tenet that underlies the planning for this work: **High quality care should be the same no matter who is paying for that care.** Women should receive mammograms when clinical circumstances require; breast cancer should be detected early no matter who is paying the bill. The objective of a single set of measures embodies the belief that health plans should be held accountable to the same standard of care for all patients; and that the standard should be dictated by medical science, not by insurance programs nor by patient circumstance. For a number of reasons, the CPM was unable to achieve full integration of the measurement set. However, the CPM expects full integration in the next 24 to 36 months.

THE REMAINDER OF THIS DOCUMENT

The remainder of the document will provide more details about HEDIS 3.0, beginning in the next chapter with the process that led to its construction. In Chapter 3, we describe the components of the set. Chapter 4 is a discussion of issues related to the interpretation and use of HEDIS 3.0 data, and Chapter 5 offers some thoughts about the future of HEDIS in particular and performance measurement in general.

Three appendices follow. The first is a series of acknowledgments of those individuals and organizations who volunteered their time and/or entered into other partnership with NCQA to make the development of HEDIS 3.0 possible. Appendix 2 is an acknowledgment of those many organizations and individuals who responded to our Public Call for Measures: those who provided the raw materials from which HEDIS 3.0 was built and who share in the authorship of this work. Appendix 3 provides a list of selected references used in the development of each HEDIS 3.0 measure.

CHAPTER 2

BUILDING HEDIS 3.0

HEDIS 3.0 was developed by a broad-based committee — the Committee on Performance Measurement. The CPM was organized and staffed by the National Committee for Quality Assurance (NCQA); funding for its work came from a wide variety of public and private sources. The members of the CPM were chosen to reflect the diversity of constituencies that performance measurement must serve: purchasers, both private and public (Medicare and Medicaid); consumers; organized labor; medical providers; public health officials, and health plans. In addition, a number of other individuals were asked to serve, to bring other important perspectives as well as additional expertise in the areas of quality management and the science of measurement.

STRATEGIC PLAN

The CPM began its work in September 1995. Its goal was to develop HEDIS 3.0 and manage the evolution of this standardized set of performance measures over time. Five priorities shaped its strategy:

- First, there was a need to begin to fill some of the gaps that had been identified since the release of HEDIS 2.0. There was a need for more measures related to acute and chronic illness, for measures that applied to populations other than the commercially insured (particularly Medicare), for measures that were more relevant to the consumers of health care, for measures that were more balanced with respect to the populations covered (e.g., conditions relevant to adult males were not as well addressed as adult females), and for measures that focused to a greater extent on the results that health plans achieve, rather than on the processes used to achieve them. There was also a commitment to begin to address some of the technical limitations of HEDIS 2.0 measures, particularly the absence of a strategy for adjusting for differences in the characteristics of the populations that health plans serve; differences that might affect measured results, but that were not related to health plan performance.
- Second, NCQA wanted to integrate the recently released Medicaid HEDIS measures into the broader measurement set. The Medicaid work had begun two years before the strategy envisioned for HEDIS 3.0. Given that the 3.0 set was to be expanded to the Medicare population as well, NCQA was concerned about the potential burden created by separate and possibly redundant measurement sets for each population. Moreover, if measurement was made consistent across

populations, comparisons could be more easily made. Thus, where appropriate, systems-based quality improvement activities could yield more powerful results for a greater number of members, more efficiently.

- Third, given the reach of HEDIS, it was clear that the process needed to include a broader range of "end-users" than had been previously involved. These included consumers, public health officials, measurement experts, unions and public purchasers. Incorporating these perspectives into the development of HEDIS 3.0 explicitly addressed the desire to expand its relevance beyond the privately insured, and to build an efficient process for meeting the diverse information needs of various users. A complete list of the 24-member CPM is found in the Acknowledgments section.

- Fourth, the field of performance measurement, while still young, is active — with significant work occurring in many different settings throughout the country, including research organizations, managed care plans, medical specialty societies, pharmaceutical research departments, health care institutions, and voluntary health organizations. Many of these efforts focus on levels of measurement other than the health plan itself. However, NCQA believed that the development of HEDIS 3.0 should attempt, wherever possible, to build on these efforts rather than to duplicate or ignore them. Thus, NCQA's strategy was to begin the process of evolving HEDIS by reaching out to bring in the best-available measures and by then assessing to what extent those measures were likely to meet the information needs of the public. By doing so, the Committee was not only able to leverage current work, but was also able to identify promising measures for "cultivation," and to identify areas in which focused research and development was needed to create measures for the future.

- Finally, the resources devoted to collecting and reporting HEDIS, its potential impact on employer and consumer decisions and the importance of measurement in setting the strategic direction of managed care organizations all emphasized the need to ensure that developers incorporate scientific rigor into their methods. In formulating the procedures for developing HEDIS 3.0, every reasonable effort was made to build in mechanisms that subjected proposed measures to a critical evaluation based on such criteria as relevance to users, scientific validity and operational feasibility.

Given its objectives — to develop a HEDIS that met the broad information needs of public and private payers and members and to develop a process to assure that future sets would continue to do so — the CPM began to map out its strategy for moving quickly toward those ends. An early commitment was to begin with the HEDIS measures that were already available — those developed for commercial enrollees (HEDIS 2.5) and those developed for the Medicaid program (Medicaid HEDIS). The CPM's strategy here was to integrate these measures into a single, non-duplicative set and then to expand those measures (where feasible and appropriate) to include the Medicare population as well. Thus, the platform from which HEDIS 3.0 was built were its predecessors — HEDIS 2.5 and Medicaid HEDIS — measures already in use in more than 330 health plans across the country.

It was clear from the beginning, however, that there were issues that were not adequately addressed by available HEDIS measures. At its first meeting, the CPM began to map out a strategy to develop additional measures — for HEDIS 3.0 and future generations of HEDIS as well. The CPM immediately recognized that the task of developing new measures was beyond its ability — that a Committee organized to manage the process of measures development could not possibly include all the knowledge required to build measures. More than that, the CPM recognized that the task of expanding HEDIS could best be accomplished by taking advantage of the collective knowledge and expertise of clinical and measurement experts across the country. As a result, it laid out an open process for developing measures: one that began with the CPM communicating to those outside of it the information that the public needed to assess the relative performance of health plans. It required, as well, that the CPM develop criteria to evaluate measures, to enable the Committee to systematically and objectively assess the extent to which measures brought to it responded to the needs the Committee had articulated.

EVALUATION OF NEW MEASURES

The CPM was fortunate to be able to draw upon the expertise and knowledge of so many individuals and organizations. To help members understand what information was important to purchasers and consumers, the Committee commissioned an expert subcommittee to prepare a report on the information needs of the Medicare program and its beneficiaries; it reviewed the work of NCQA's Medicaid Workgroup, which had produced Medicaid HEDIS; it commissioned a synthesis of available knowledge about how privately insured consumers make choices about health plans, and brought a number of experts in that field to its meetings, and it commissioned focus groups to assess consumer reaction to possible measures.

To help members understand the science and state of the art in performance measurement, the Committee organized a Technical Advisory Committee (TAC), and commissioned papers by leading experts in the field. These papers and the TAC brought unprecedented levels of science and evidence to the Committee's deliberations.

With these resources and NCQA staff support, the Committee set about first to try to understand the information needs to which HEDIS 3.0 had to respond and the characteristics (or "attributes") of measures that would make them useful to purchasers and consumers to assist in health plan selection. The Committee laid out eight "domains," or categories, which represent the broad areas in which results matter. (These domains are described in more detail in the next chapter.) These, the Committee decided, were the areas in which measures needed to focus:

Effectiveness of care: Is care achieving the gains in health expected?

Access/availability of care: Is care available to those who need it, without inappropriate barriers and delay?

Satisfaction with the experience of care: Is the experience of care satisfying, as well as clinically effective?

Cost of care: Is care high value?

Stability of the health plan: Is the health plan stable — or will I experience the sort of change that could disrupt my care?

Informed health care choices: Is the health plan successful at helping members to be active and informed partners in health care decisions?

Use of services: How are resources used? Is there evidence of too much — or too little — care?

Health plan descriptive information: How is the plan organized? What type of doctors participate, and how many?

In each of these domains, the CPM sought measures that would help purchasers and consumers compare health plans. The Committee thought long and hard about the characteristics of measures that would make them useful for such a purpose. With the assistance of TAC members, the Committee laid out a series of criteria that defined the attributes that it felt important for measures to possess in order to be included in HEDIS 3.0 and future generations of HEDIS. These attributes fell into three major categories:

Relevance. Measures had to be relevant to purchasers and/or consumers if they were to be considered for inclusion in HEDIS 3.0. Measures were relevant to the extent that they addressed issues that were known to significantly affect health outcomes, to the extent that those issues were controllable (or at least could significantly be influenced by) the health plan, to the extent that there was known or suspected significant differences between health plans (or between average performance and ideal performance) and to the extent that there was evidence that purchasers and/or consumers would use that information in selecting a health plan.

Scientific soundness. Measures had to be scientifically sound for the CPM to have confidence that the information produced through measurement would lead to better decisions. To be sound, the Committee sought measures that were reproducible (i.e., that produce the same results when repeated in the same populations and setting), valid (i.e., make sense logically and relate to other measures looking at the same aspect of care) and accurate (i.e., measure what is actually happening). Measures also had to have sufficient statistical power to detect differences of the magnitude expected between health plans (or the measures would not be useful for comparison) and had to include a strategy to adjust results for other factors (such as characteristics of the health plan population) that might lead to measured differences in health plan results.

Feasibility. The CPM was interested in producing a measurement set that was useful in 1996. While it was unwilling to be tightly bound by the limitations of current information systems — an explicit objective of the CPM was to use HEDIS measures to stimulate improvements in those information systems — it was also clear that those potential HEDIS measures that were easy to produce would be of most value in the short run. In order to be feasible, a measure needed to be clearly specified (and specified in a manner that could be calculated with data that might be available), it had to be possible to produce the measure at a reasonable cost and the collection of data for the measurement could not threaten the confidentiality of any patient information.

The CPM recognized that few available measures were likely to have all of these attributes to the extent desired, but agreed that the long-term requirements for HEDIS measures should be established and communicated as early as possible. More than that, the Committee used these attributes to guide its evaluation of potential HEDIS measures and to identify issues that could be resolved empirically where measures fell far short.

The domains and attributes were summarized in the CPM's December 1995 "Public Call for Measures." That solicitation of input was mailed to more than 1,700 organizations; hundreds more obtained it via the Internet. By March 1996, 826 measures (in various stages of development) had been submitted to NCQA.

Over the next three months, these measures were evaluated by NCQA staff, by a multi-disciplinary review team of 17 experts (including members of the CPM and TAC, but also individuals involved in the development of earlier versions of HEDIS and experts from outside the process) and by the CPM itself. The review team (and a second special panel, constituted to review measures in the area of behavioral health) used multi-voting processes to choose subsets of the most promising measures.

These relatively smaller sets of measures were exhaustively "worked up" by experts in the fields relevant to their analysis. Again, the CPM was fortunate to be able to draw upon the very best scientific resources: the U.S. Centers for Disease Control and Prevention (CDC), the Agency for Health Care Policy and Research (AHCPR), the Health Care Financing Administration (HCFA) and the RAND Corporation, as well as a number of individuals (acknowledged elsewhere) who are, without question, among the leaders in their fields. In addition, the HEDIS Users Group — primarily a group of health plans that have worked with NCQA to improve earlier HEDIS measures — provided invaluable assistance developing the detailed specifications for potential measures. Work-ups analyzed available evidence relevant to each of the attributes important to the CPM; these analyses were summarized in 10- to 30- page papers that CPM members read before meetings. At the final CPM meetings, measures were voted into HEDIS 3.0. New measures that were felt to possess important attributes to the extent necessary were voted into the set of measures to be made the new national reporting standard. Descriptions of these measures are in the next chapter, and detailed specifications are included in Volume 2.

There were a number of new measures that addressed very important issues, but for which available evidence and expert judgment raised significant concerns about the measures' scientific soundness or feasibility. The Committee had vigorous (and often passionate) debate about these measures — trying to determine the right balance between the need to respond to the urgent demand for information on critically important issues and the need to prevent the diversion of precious resources into the collection of data that might produce invalid information. The CPM realized that some of the things we might hope to measure are simply not measurable right now. But it also realized that — by taking an active role in developing new measures — its process could accelerate the rate at which knowledge is gained.

BALANCING A PERFORMANCE MEASUREMENT SET

The Committee chose to create a new element of HEDIS: a set of promising measures that address important issues but are as yet "immature," and that will be tested and refined under the CPM's direction. This "Testing Set" is one of the ways that the CPM hopes to facilitate the development of the measures that are needed to close remaining gaps in HEDIS; it is a "garden" of measures that will — as it matures — feed subsequent generations of HEDIS. Descriptions of these measures (with some of the outstanding issues that need to be addressed) are also in the next chapter, but specifications for Testing Set measures are **not** included in Volume 2.

As the CPM was considering the addition of new measures, it also considered whether measures from earlier versions of HEDIS were still necessary. In fact, several measures were retired — either because clearly superior measures came to light that made older measures redundant, because experience had established that these measures were not sound or not feasible or because the marginal value associated with a measure seemed small relative to the burden associated with it.

In addition to removing specific measures from the Reporting Set, the CPM also identified a number of strategies that could be implemented to assure that full compliance with HEDIS was within the financial and logistical reach of both large and small health plans. The CPM solicited comments during a 45-day comment period regarding how to make the transition to HEDIS 3.0. Comments from 300 organizations were received and were summarized for review by the CPM.

On September 25 and 26, 1996, the CPM met to consider these comments and to make final changes to the measurement set. One fundamental clarification involved the time-frame over which the transition to HEDIS 3.0 from earlier versions of HEDIS reporting will be expected. In short, for the Effectiveness of Care, Health Plan Stability, Cost of Care, Informed Health Care Choices and Health Plan Descriptive Information domains, all HEDIS 3.0 measures are required for all populations to which they are applicable in **Reporting Year 1996** (data to be reported in 1997). For the Use of Services and Access/Availability of Care domains, measures that originated in HEDIS 2.5 will be upgraded to 3.0 specifications and applicable to the appropriate populations in **Reporting Year 1996**, and measures that originated in Medicaid HEDIS will be upgraded to HEDIS 3.0 specifications but applicable only to the Medicaid populations until **Reporting Year 1997** (data reported in 1998). Health plans should be prepared to report their HEDIS information to external requesters by June 1, 1997. Refer to the Reporting Year 1996 and Reporting Year 1997 matrices in *Volume 2: Technical Specifications* for more detailed instructions.

CHAPTER 3

THE HEDIS DOMAINS

and Descriptions of the Measures

In this chapter, we describe the eight general areas, or domains, in which HEDIS provides information and the measures that constitute each domain. Two kinds of measures are described: those in the HEDIS 3.0 Reporting Set and those in the HEDIS 3.0 Testing Set.

Health plans are expected to provide information on measures in the Reporting Set. Instructions for calculating the Reporting Set measures are in Volume 2. Health plans will not be able to provide information on Testing Set measures; NCQA will collaborate with researchers, health plans and purchasers to resolve any issues with these measures, so that the research questions can be answered as soon as possible. We include them in this document to offer health plans a "heads up" and to give consumers, purchasers and others a preview of the information we hope to make available to them in the future. Within the description of each Testing Set measure is a brief list some of the issues to be tested. As the testing of measures will be comprehensive, this list of issues to be tested is not meant to be exhaustive; rather, it is intended to give a sense of the important questions and issues surrounding each measure.

This chapter provides some guidance regarding use of HEDIS information for assessing health plan performance. Please note that each measure may or may not be applicable to each of the three populations assessed by HEDIS (those covered by Medicaid, those commercially insured, and those covered by Medicare); the specifications for each Reporting Set measure (in Volume 2) indicate to which populations the measure applies.

HEDIS 3.0 REPORTING SET MEASURES

Effectiveness of Care

Childhood Immunization Status

Adolescent Immunization Status

Advising Smokers to Quit

Flu Shots for Older Adults

Breast Cancer Screening

Cervical Cancer Screening

Prenatal Care in the First Trimester

Low Birth-Weight Babies

Check-Ups After Delivery

Treating Children's Ear Infections

Beta Blocker Treatment After a Heart Attack

Eye Exams for People with Diabetes

The Health of Seniors

Follow-Up After Hospitalization for Selected Mental Illnesses

Access/Availability of Care

Adults' Access to Preventive/Ambulatory Health Services

Children's Access to Primary Care Providers

Availability of Primary Care Providers

Availability of Mental Health/Chemical Dependency Providers

Availability of Obstetrical and Prenatal Care Providers

Initiation of Prenatal Care

Low Birth-Weight Deliveries at Facilities for High-Risk Deliveries and Neonates

Annual Dental Visit

Availability of Dentists

Availability of Language Interpretation Services

Satisfaction with the Experience of Care

- Member Satisfaction Survey
- Survey Descriptive Information

Health Plan Stability

- Disenrollment
- Provider Turnover
- Years in Business/Total Membership
- Indicators of Financial Stability
- Narrative Information on Rate Trends, Financial Stability and Insolvency Protection

Use of Services

- Frequency of Ongoing Prenatal Care
- Well-Child Visits in the First 15 Months of Life
- Well-Child Visits in the Third, Fourth, Fifth And Sixth Years of Life
- Adolescent Well-Care Visit
- Frequency of Selected Procedures
- Inpatient Utilization — General Hospital/Acute Care
- Ambulatory Care
- Inpatient Utilization — Nonacute Care
- Discharge and Average Length of Stay — Maternity Care
- Cesarean Section and Vaginal Birth After Cesarean (VBAC-Rate)
- Births and Average Length of Stay, Newborns
- Mental Health Utilization — Inpatient Discharges and Average Length of Stay
- Mental Health Utilization — Percentage of Members Receiving Inpatient, Day/Night Care and Ambulatory Services
- Readmission for Selected Mental Health Disorders
- Chemical Dependency Utilization — Inpatient Discharges and Average Length of Stay
- Chemical Dependency Utilization — Percentage of Members Receiving Inpatient, Day/Night Care and Ambulatory Services
- Readmission for Chemical Dependency
- Outpatient Drug Utilization

Cost of Care

Rate Trends

High-Occurrence/High-Cost DRGs

Informed Health Care Choices

New Member Orientation/Education

Language Translation Services

Health Plan Descriptive Information

Board Certification/Residency Completion

Provider Compensation

Physicians Under Capitation

Case Management

Utilization Management

Risk Management

Quality Assessment and Improvement

Recredentialing

Preventive Care and Health Promotion

Arrangements with Public Health, Educational and Social Service Organizations

Pediatric Mental Health Services

Chemical Dependency Services

Family Planning Services

Total Enrollment

Enrollment by Payer

Unduplicated Count of Medicaid Members

Diversity of Medicaid Membership

Weeks of Pregnancy at Time of Enrollment in the Health Plan

HEDIS 3.0 TESTING SET MEASURES

Effectiveness of Care

Substance Counseling for Adolescents

Number of People in the Plan Who Smoke

Smokers Who Quit

Flu Shots for High-Risk Adults

Stage at Which Breast Cancer Was Detected

Chlamydia Screening

Colorectal Cancer Screening

Aspirin Treatment After a Heart Attack

Follow-Up After an Abnormal Pap Smear

Follow-Up After an Abnormal Mammogram

Use of Appropriate Medications for People with Asthma

Monitoring Diabetes Patients

Prevention of Stroke in People with Atrial Fibrillation

Outpatient Care of Patients Hospitalized for Heart Failure

Cholesterol Management of Patients Hospitalized for Coronary Artery Disease

Controlling High Blood Pressure

Assessment of How Breast Cancer Therapy Affects the Patient's Ability to Function

Prescription of Antibiotics for the Prevention of HIV-Related Pneumonia

Screening for Chemical Dependency

Continuity of Care for Substance Abuse Patients

Failure of Substance Abuse Treatment

Continuation of Depression Treatment

Availability of Medication Management and Psychotherapy for Patients with Schizophrenia

Appropriate Use of Psychotherapeutic Medications

Family Visits for Children Undergoing Mental Health Treatment

Patient Satisfaction with Mental Health Care

Access/Availability of Care

Problems with Obtaining Care

Satisfaction with the Experience of Care

Consumer Assessments of Health Plans Study (CAHPS)

Disenrollment Survey

Satisfaction with Breast Cancer Treatment

Use of Services

Use of Behavioral Health Services

Cost of Care

Health Plan Costs Per Member Per Month

Informed Health Care Choices

Counseling Women About Hormone Replacement Therapy

EFFECTIVENESS OF CARE

When comparing health plans, most people want to know how well the plans treat their members' medical problems. Information about the clinical quality of health care actually delivered by health plans has long been elusive, leaving consumers and purchasers to rely on the anecdotal opinions of others or the unsubstantiated claims of the plans themselves.

Effectiveness of Care measures generally look at the impact of care delivered to certain populations enrolled in a health plan. In most cases, the measured impact is positive, and the higher the score on a measure the better. For example, in a measure on treatment for patients who have had a heart attack, one would look for a high score indicating that the plan took certain clinical actions to help reduce the chances that another heart attack will occur. Of course, some people enrolled in health plans are sicker than others, which makes it more difficult to measure clinical quality. Measurement strategies need to incorporate mechanisms to adjust for these differences in patient populations (taking these factors into account when reporting statistics is referred to as "risk adjustment").

Measures in the Effectiveness of Care domain give consumers and purchasers important information about the quality of the clinical care provided by different plans. The measures have been grouped by the type of care they address (preventive, early detection and screening, maternity, acute, chronic and behavioral health), and the population of concern (children, adolescents, adults, and seniors). They take into account how well the plan incorporates widely accepted preventive practices (such as childhood immunizations), recommended screenings for common diseases (like breast and cervical cancer) and treatment for pregnant women (such as prenatal care in the first trimester) into the health care it provides. Effectiveness of Care measures also help consumers compare how plans are treating members who are already ill (for example, patients who have had a heart attack or children with ear infections) as well as those who have chronic diseases (such as asthma and diabetes) that need to be managed in order to avoid or minimize complications.

For some of the measures, we have been able to provide the performance goals in *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*, which was issues by the Public Health Service in 1990 and updated in 1995.

Keeping People Healthy: Health Maintenance and Disease Prevention

CHILDREN

Childhood Immunization Status

Childhood immunizations help prevent serious illnesses, such as polio, tetanus, whooping cough and meningitis. Vaccines are an easy, proven way to help a child stay healthy and avoid the potentially harmful effects of childhood diseases such as the mumps and measles. The Centers for Disease Control and Prevention, American Academy of Pediatrics, American Academy of Family Physicians and Advisory Committee on Immunization Practices all recommend that by their second year of life, children should have received four shots of DTP (diphtheria-tetanus-pertussis), three

OPV/IPV (oral or injectable polio virus) vaccines, one dose of MMR (measles-mumps-rubella) vaccine, a minimum of three Hib (Haemophilus influenza type B) vaccines, and three HepB (hepatitis B) vaccines. The *Healthy People 2000* goal is to increase to 90% the proportion of children up to 2 years of age who are fully immunized.

This measure estimates the percentage of children in the plan who received the appropriate immunizations by their second birthday. ***This measure is required for reporting.***

ADOLESCENTS

Adolescent Immunization Status

Immunizations are a proven defense against serious illnesses, such as hepatitis B, polio, tetanus and diphtheria, so health plans should help ensure that adolescents are vaccinated according to schedule. Experts in the field recommend that by the time children are 13 years old, they should have received the following immunizations: MMR-2 (second dose of measles-mumps-rubella), HepB (hepatitis B), Td (tetanus-diphtheria booster) and VZV (chicken pox), if they haven't already had the disease. The *Healthy People 2000* goal is to increase to 90% the proportion of children up through age 12 who are fully immunized.

This measure estimates the percentage of 13 year olds in the plan who received all of the appropriate immunizations. ***This measure is required for reporting.***

Substance Counseling for Adolescents

Adolescence is a time of dramatic physical, cognitive, social and emotional changes. Such change can lead to alcohol, tobacco and drug use, all of which can raise the risk of health problems. In the United States, 1 in 5 adolescents has smoked cigarettes and 1 in 11 has drunk alcohol by the age of 11. By the age of 15, 1 in 7 adolescents smokes on a daily basis, while 1 in 3 has drunk excessively at least once. Many experts agree that health care providers should counsel adolescents to help prevent alcohol and other drug abuse problems, identify adolescents in trouble, and offer referrals to self-help resources and treatment services. The *Healthy People 2000* goal is to reduce the proportion of young people who have used alcohol, marijuana and cocaine in the past month: by 13% for alcohol use among 12-17 year olds and by 29% among 18-20 year olds, by 3% for marijuana use among 12-17 year olds and by 8% among 18-20 year olds and by 1% for cocaine use among 12-17 year olds and by 2% among 18-20 year olds.

This measure estimates the percentage of adolescents 12 to 21 years old who were counseled on substance abuse during the reporting year. ***This measure is being evaluated for inclusion in a future reporting set.*** We need to determine the extent to which plans are recording substance abuse counseling accurately and completely, and how often substance abuse counseling is done as part of adolescent well-care visits. In addition, we need to determine at what age this counseling should begin. These issues, among others, will be evaluated during the testing phase.

ADULTS

Number of People in the Plan Who Smoke

Smoking is the leading preventable cause of death in the United States and is responsible for more than 400,000 deaths each year. One out of two lifelong smokers will die from a smoking related disease. In addition, the total economic cost of smoking (including loss of productivity) was about $100 billion in 1990, with the direct medical costs associated with smoking amounting to 7.1% of national medical expenditures.

The 1990 Surgeon General's Report concluded that quitting smoking reduces the risk of premature death. In fact, it can reduce a person's risk of dying in the next 15 years by about 50%. Measuring how many adult plan members currently smoke can be used to determine how important a problem smoking is for a plan. Furthermore, changes over time may demonstrate how successful a health plan's efforts to get people to stop smoking have been.

This measure estimates the percentage of adults in the plan who smoke. ***This measure is being evaluated for inclusion in a future reporting set.*** The impact that plans can make on prevalence may be as low as 1% per year. Thus, the use of smoking prevalence to distinguish between plans needs to be assessed. A risk-adjustment strategy may be needed to enable this measure to be used for plan comparisons. These issues, among others, will be evaluated during the testing phase.

Advising Smokers to Quit

Seventy percent of smokers are interested in stopping smoking completely and smokers report that they would be more likely to stop smoking if a doctor advised them to quit. A number of clinical trials have demonstrated the effectiveness of clinical quit-smoking programs. Getting even brief advice to quit is associated with a 30% increase in the number of people who quit.

This measure looks at the percentage of adult smokers or recent quitters who received advice to quit smoking from a health professional in the plan. ***This measure is required for reporting.***

Smokers Who Quit

Twenty-five percent of Americans (46 million adults) were smokers in 1993. Quitting smoking reduces the risk of lung and other cancers, heart attack, stroke and chronic lung disease. Women who stop smoking before pregnancy or during the first three months of pregnancy reduce their risk of having a low-birth weight baby to the same risk as women who never smoked. The excess risk of coronary artery disease is reduced by about half after one year of quitting and then continues to decline gradually. Studies have also shown that quitting smoking saves money. Smokers who quit before age 45 are likely to avoid 54% to 67% of expected lifetime economic losses due to smoking and those over age 70 are likely to avoid 32% to 52% of such costs.

This measure estimates the percentage of adult smokers in the plan who quit smoking in the past year. ***This measure is being evaluated for inclusion in a future reporting set.*** Plans may experience success at first, with smokers who are less entrenched in the habit.

However, over time, a plan's success may diminish as it tries to influence the more hard-core smokers. Because plans will be at different stages in their efforts, a risk-adjustment strategy may be needed to make this a valid measure for comparing between plans. These issues, among others, will be evaluated during the testing phase.

Flu Shots for High-Risk Adults

People with chronic conditions, such as heart or lung disease, diabetes, immunodeficiency, Hodgkin's disease or cancer have a higher risk of suffering from complications of influenza, such as pneumonia, and dying from these complications than otherwise healthy people. Experts recommend that these individuals receive flu shots every year to prevent the flu or to reduce the risk of complications if they become infected.

This measure estimates the percentage of adult plan members who have underlying health problems that put them at risk for complications from the flu who received the influenza vaccine during the past year. ***This measure is being evaluated for inclusion in a future reporting set.*** The need for flu shots among high-risk patients is clear; however, the definition of "high-risk" is so broad that the ability of plans to effectively change the immunization rate for the group as currently defined is questionable. To avoid encouraging the inefficient use of resources, a more actionable population definition needs to be developed. Flu shots are often given out of plan, and there is no requirement for documenting the flu shot, as there is for childhood immunizations. It may be more feasible to collect these data through survey. These issues, among others, will be evaluated during the testing phase.

SENIORS

Flu Shots for Older Adults

Influenza accounts for 10,000 to 40,000 or more deaths each year in the United States. Older adults are at high risk for developing more serious infections, such as pneumonia, following the flu. For that reason, experts recommend that all adults over age 65 receive flu shots every year to reduce the risk of developing serious complications if they become infected. Vaccination programs against influenza have been shown to reduce the incidence of illness and death, as well as to be cost effective. The *Healthy People 2000* goal is to increase to at least 80% the proportion of seniors immunized against influenza.

This measure looks at the percentage of plan members over 65 who received the influenza vaccine prior to the past year's flu season. ***This measure is required for reporting.***

Early Detection and Screening

Breast Cancer Screening

Breast cancer is the most common type of cancer among American women. Experts estimate that a woman in this country stands a one in nine (about 11%) chance of developing breast cancer at some point in her life, assuming she lives to age 85. In fact, each year in the United States, more than 175,000 women are diagnosed with breast cancer—equivalent to another woman learning she has breast cancer every three minutes. An estimated 46,000 women die of the disease every year, according to the American Cancer Society. Yet death from breast cancer can be significantly reduced by identifying and treating the cancer as early as possible.

Mammograms are the most effective method for detecting breast cancer at the time it is most treatable. A mammogram is an x-ray of the breast that can reveal tumors too small to be felt by hand and can show other changes in the breast that may suggest cancer. When high-quality equipment is used and the x-rays are read by well-trained radiologists, 85% to 90% of cancers are detectable. Breast cancer is most commonly found in women between 50 and 64 years old. The *Healthy People 2000* goal is to increase to at least 60% the proportion of women who had at least one mammogram during the past two years.

This measure estimates the percentage of the plan's female members between the ages of 52 and 69 who had at least one mammogram during the past two years. ***This measure is required for reporting.***

Stage at Which Breast Cancer Was Detected

The survival rate for breast cancer patients is only 18% when the cancer has spread to distant organs (late-stage cancer), but it is 73% when the cancer has not spread beyond the surrounding region, and 94% when the cancer is still localized.

This measure assesses the effectiveness of screening by evaluating in how many women breast cancer was detected in the later stages. ***This measure is being evaluated for inclusion in a future reporting set.*** The small number of expected breast cancer cases may make it impossible to calculate rates that are meaningful or that permit detection of differences between plans. This issue, among others, will be evaluated during the testing phase.

Cervical Cancer Screening

Approximately 13,000 new cases of cervical cancer (cancer of the opening of the uterus, or womb) are diagnosed annually. Cervical cancer can be detected in its early stages by regular screening using a Pap smear test, which has been credited with reducing the number of deaths from cervical cancer by as much as 75%. A number of organizations, including the American College of Obstetricians and Gynecologists, the American Medical Association, and the American Cancer Society, recommend Pap testing every one to three years for all women who have been sexually active or who are over 18 years old. The *Healthy People 2000* goal is to increase to at least 85% the proportion of women who received at least one Pap smear during the past three years.

This measure estimates the percentage of women in the plan age 21 to 64 who had at least one Pap smear during the past three years. *This measure is required for reporting.*

Chlamydia Screening

Chlamydia is not widely known, but it is an important health problem. It is the most common sexually transmitted bacterial disease in the United States, with an estimated 2 million new infections in women each year. It is usually a silent illness; about 70% of infected women have no symptoms. Left untreated, chlamydia can cause pelvic inflammatory disease, infertility, ectopic pregnancy and chronic pelvic pain. Regular screening for the infection by testing for it during annual gynecological check-ups is often the only way to detect it so it can be treated before complications arise. Detection and treatment also help keep the person from spreading the disease.

This measure estimates the percentage of women between the ages of 15 and 25 who were screened for chlamydia in the past year. ***This measure is being evaluated for inclusion in a future reporting set.*** Since sexually active women are the group of interest for chlamydia screening, a reliable method needs to be developed to distinguish women who are sexually active from those who are not. We also need to assess how reliably chlamydia screening is reported. These issues, among others, will be evaluated during the testing phase.

Colorectal Cancer Screening

Cancer of the colon or rectum is the second leading cause of death from cancer, accounting for 14% of cancer deaths in men and 15% of deaths among women. Annually, about 150,000 new cases of colorectal cancer are diagnosed and another 56,000 individuals die from the disease. Detection of this cancer at an early stage greatly increases a person's chances for survival. Five-year survival rates are 91% for those diagnosed with localized cancer, compared to 60% for cancers that have spread throughout the region and 6% for those that have spread to distant organs.

Five screening interventions are used to detect colorectal cancer: digital rectal examination (the doctor inserts a gloved finger into the rectum to check for abnormalities), fecal occult blood testing (a lab test that checks for blood in the stool), sigmoidoscopy (a thin, flexible optical device allows the doctor to examine the last two feet of the colon), air contrast barium enemas (a chalky liquid is released into the colon and then an x-ray is taken of the colon wall), and colonoscopy (a thin, flexible optical device allows the doctor to examine the colon and remove any small protrusions or cancers). Fecal occult blood testing and sigmoidoscopy have been suggested for use in screening the general population, while barium enema and colonoscopy are recommended for use only among those at increased risk for developing the disease.

This measure estimates the percentage of plan members age 55 and older who have been screened for colorectal cancer. ***This measure is being evaluated for inclusion in a future reporting set.*** While colorectal cancer screening is important, some screening procedures are uncomfortable, and some patients may decide not to have the screening even if it is recommended. A valid way of dealing with patient compliance needs to be developed. This issue, among others, will be evaluated during the testing phase.

Maternity Care

Prenatal Care in the First Trimester

Health plans that provide timely, thorough and effective prenatal care can help reduce a woman's likelihood of delivering a low birth-weight infant and can detect and address maternal health problems early in the pregnancy. Early prenatal care is also an essential part of what is needed to help a pregnant woman prepare to become a mother. Good prenatal care plays a critical role in reducing infant mortality. Regular prenatal visits help health care providers identify and treat or prevent problems early. Problems are often easily corrected when discovered early, but left untreated they can threaten the health of both mother and child. The *Healthy People 2000* goal is to increase to 90% the proportion of women receiving prenatal care during the first trimester.

This measure estimates the percentage of pregnant women in the plan who began prenatal care during the first 13 weeks of pregnancy. ***This measure is required for reporting.***

Low Birth-Weight Babies

In the United States, 263,000 low birth-weight babies are born each year. Low birth-weight infants weigh less than 5.5 pounds, while very low birth-weight babies weigh less than 3.3 pounds. Low birth weight is associated with higher risk of both infant death and disability. While many risk factors for low birth weight fall outside the control of the health care provider, timely and comprehensive prenatal care and the careful management of women at high risk for premature delivery can lower the possibility of having an underweight baby. The *Healthy People 2000* goal is to reduce to 5% or less the proportion of babies born underweight.

This measure estimates what percentage of babies born to plan members were underweight (either low or very low birth weight). ***This measure has been deferred for the 1996 reporting year, because of persistent problems with risk adjustment and the difficulty of identifying low birth-weight infants using administrative data. Improved specifications will be developed and the measure will be required for the 1997 reporting year.***

Check-Ups After Delivery

The six weeks after giving birth are a period of physical, emotional and social changes for the mother, during a time when she is also adjusting to caring for her new baby. So that the new mother can be evaluated and receive any necessary assistance, the American College of Obstetricians and Gynecologists recommends that women see their health care provider at least once by the 42nd day after giving birth. The first postpartum visit includes a physical examination, and also provides an opportunity for the health care provider to answer parents questions and give family planning guidance and counseling on nutrition.

This measure estimates the percentage of women who had live births who had a postpartum visit within six weeks after delivery. ***This measure is required for reporting.***

Treating Acute Illness

CHILDREN

Treating Children's Ear Infections

By their first birthday, about half of all children born in the U.S. have had at least one ear infection (otitis media) and 20% have had more than three. Ear infections account for 40% of all antibiotics prescribed to children. Prescribing the wrong antibiotic can cause serious problems. Using new, broad-spectrum antibiotics for uncomplicated infections may create resistance to those antibiotics and leave providers with no way to treat subsequent ear infections. It also creates a risk that these antibiotics won't work for other, more serious infections.

This measure looks at how often children with acute otitis media were given the appropriate treatment. ***This measure is required for reporting.***

ADULTS

Beta Blocker Treatment After a Heart Attack

About 1.5 million Americans annually experience a heart attack (or myocardial infarction) and about 500,000 of them die from it. The American Heart Association estimates that the total annual cost of medical care and lost productivity due to heart attacks is $12 billion to $24 billion. A heart attack occurs when the blood supply to part of the heart muscle is severely reduced or stopped and heart tissue is destroyed by a lack of oxygen. People who have had a heart attack are at higher risk of having another one. One medical therapy that has been shown to lower that risk is the use of beta blockers, which lower blood pressure and reduce how hard the heart has to work.

This measure estimates the number of plan members who were discharged from the hospital after a heart attack (and did not show evidence that beta blockers might have negative side effects for them) were dispensed a prescription for beta blockers. ***This measure is required for reporting.***

Aspirin Treatment After a Heart Attack

Like beta blockers, aspirin is a drug that is given to people after a heart attack to reduce their risk of having another one. Aspirin affects the way the blood clots by making platelets (a certain group of blood cells) less "sticky"; this both reduces the accumulation of platelets that can block an artery and prevents the formation of a clot when bleeding occurs. Taking aspirin after a heart attack can reduce the chances of death and stroke, in addition to reducing the chances of having another heart attack.

This measure looks at how many plan members who were discharged from the hospital after a heart attack were instructed to take aspirin. ***This measure is being evaluated for inclusion in a future reporting set.*** Aspirin is an over-the-counter drug, so no prescription is filled, which may prevent plans from getting accurate data for the measure. The small number of patients who have heart attacks may also limit the measure's power to detect differences between health plans. These issues, among others, will be evaluated during the testing phase.

Follow-Up After an Abnormal Pap Smear

In 1994, approximately 15,000 women were diagnosed with cervical cancer and 4,600 died from it. Routine Pap smears, which detect cell changes that may lead to cancer, are the preferred method for detecting this disease at an early stage. Women whose Pap smear detects a problem need additional diagnostic tests to guide appropriate intervention. At the very least, a second Pap smear should be performed to confirm the results of the first. An abnormal Pap test that is not followed up creates a real risk that there will be a needless delay in the diagnosis of cancer and that the likelihood of cure will decrease.

This measure estimates the percentage of women with abnormal Pap smears who received timely follow-up evaluation. ***This measure is being evaluated for inclusion in a future reporting set.*** A valid way of defining and measuring what constitutes an abnormal Pap smear needs to be developed. Also, since different levels of abnormalities require different kinds of follow-up, a way of determining what follow-up should be considered appropriate needs to be defined. The small number of women whose Pap smears are abnormal may limit the usefulness of this measure for detecting differences between health plans. These issues, among others, will be evaluated during the testing phase.

Follow-Up After an Abnormal Mammogram

Because survival of breast cancer is highly dependent on the stage of the cancer when it is detected, a key step in the process of treating the disease is following up with a patient whose mammogram shows a tumor or abnormal growth to determine if cancer is present, so that necessary treatment can be started as soon as possible. Timeliness of follow-up is important for preserving treatment options (such as breast-conserving surgery), diminishing the psychological stress associated with uncertainty and ensuring the best results.

This measure estimates the percentage of women with abnormal mammograms who received appropriate follow-up care within 60 days. ***This measure is being evaluated for inclusion in a future reporting set.*** A valid way of defining and measuring what constitutes an abnormal mammogram needs to be developed. Also, since different levels of abnormalities require different kinds of follow-up, a way of determining what follow-up should be considered appropriate needs to be defined. The small number of women whose mammograms are abnormal may limit the usefulness of this measure for detecting differences between health plans. These issues, among others, will be evaluated during the testing phase.